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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/669,715	09/25/2003	Heume Il Baek	049128-5116	6368

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EXAMINER

MENGISTU, AMARE

ART UNIT	PAPER NUMBER
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2629

DATE MAILED: 06/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/669,715

Applicant(s)

BAEK, HEUME IL

Examiner

Amare Mengistu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the **"multiplexer"**, **"frame memory"** must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1- are rejected under 35 U.S.C. 103(a) as being unpatentable over

Applicant's Admitted Prior Art (figs. 1 and 2) in view of **HITACHI** (JP 1998-487843).

As to claim 1, **Applicant's Admitted Prior Art** discloses a liquid crystal display, comprising: a liquid crystal display panel (fig.1 (6)) having a liquid crystal cell at each intersection area of gate lines and data lines (fig.1 (GL and DL), (C1c)); a computer (fig.1 (12)) and generating processed data to implement a brightness level at a specific area of the liquid crystal display panel that is different from a remaining area of the liquid crystal display panel (see, fig.2 (A WORD MODE), (HIGH QUALITY MODE B), [0014])

Applicant's Admitted Prior Art did not explicitly disclose a video processor generating processed data to implement a brightness level at a specific area of the liquid crystal display panel that is different from a remaining area of the liquid crystal display panel; and a position designator designating the specific area of the liquid crystal display panel where the processed data is implemented.

However, the patent of **HITACHI** clearly teaches that it is well known for a display device to have a video processor generating processed data to implement a brightness level at a specific area of the liquid crystal display panel that is different from a

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remaining area of a display panel (fig.1 (4)); and a position designator designating the specific area of the liquid crystal display panel where the processed data is implemented (see, Abstract “***video display controller-selects specific signals based on predefined positional signals which is then output to video processor***”).

Therefore, it would have been obvious to one skill in the art at the time of the invention was made to have been motivated to incorporate the video controller and the video processor of **HITACHI** into the LCD display system of **Applicant's Admitted Prior Art**, because this is an advantage to obtain brightness coordination between various area of the LCD in order to improve the image quality.

As to claim 2, **HITACHI** discloses position designator designates the specific area in accordance; it would have been obvious that the designated area could be done with a program in a computer system.

As to claim 5, **HITACHI** discloses a video processor generating processed data from data such that the brightness level (see, Abstract) but failed to teach that the processed data is higher than brightness level of the data. However, **Applicant's Admitted Prior Art** clearly states that the processed data is higher than brightness level of the data ([0042]. Note: 300~400 nit is higher brightness than 200 ~300 nit).

As to claim 6, **Applicant's Admitted Prior Art** teaches a timing controller (fig.1 (4)) realigning the data and the processed data; a data driver (fig.1 (8)) supplying the

realigned data and the processed data to the data lines; and a gate driver (fig.1 (10)) supplying a scan pulse to the gate lines.

As to claim 7, the same rejection as claims 1 and 6 above except, a computer for providing data and position data for a specific area of the liquid crystal display panel. However, **HITACH** teaches that a computer for providing data and position data for a specific area of the liquid crystal display panel (see, Abstract "**video display controller**" (the same as a computer)- ***selects specific signals based on predefined positional signals which is then output to video processor***").

In regard to claim 9, **Applicant's Admitted Prior Art** discloses a driving method of a liquid crystal display system having a first picture and a second picture (fig.2 A, B) brightness level in a specific area of the second picture has a different brightness level in accordance with a type of image displayed in a specific area of the liquid crystal display panel than a brightness level of the first picture (see, [0014]. Note first picture A having a 100~150 nit brightness, picture B having a 300~400 nit brightness).

Applicant's Admitted Prior Art did not explicitly detailed that the first picture having a first field and the second picture having a second field. However, it would have been obvious to one skill in the art at the time of the invention was made to recognize that the **Applicant's Admitted Prior Art** first and second image are driven by a frames and each frames are divided in to fields. Thus, **Applicant's Admitted Prior Art's** first and second pictures have different field which is a first and second fields.

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4. Claims 3,4 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Applicant's Admitted Prior Art** in view of **HITACH** as applied to claim 1,2,5-7, and 9 above, and further in view of **Bindlish et al** (5,608,864).

As to claims 3 and 8; **Applicant's Admitted Prior Art** discloses a liquid crystal display but has failed to disclose a frame memory temporarily storing the processed data and position data for the specific area. **Bindlish et al** is cited to teach that it is conventional for display device to have frame memory temporarily storing the processed data and position data for the specific area (see, Fig. 1B (116)).

Therefore, it would have been obvious to one skill in the art at the time of the invention was made to have used **Bindlish et al's** frame buffer into the display system of **Applicant's Admitted Prior Art**, because this will provide a temporary storage for storing data and position data of the specific area to composite for difference in data rate and data flow.

As to claim 4, **Bindlish et al** also discloses that the video processor is comprised of a multiplexor (fig. 1B (114), (124)).


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amare Mengistu whose telephone number is (571) 272-7674. The examiner can normally be reached on M-F, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sumati Lefkowitz can be reached on (571) 272-3639. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Amare Mengistu
Primary Examiner
Art Unit 2629

AM
6/24/06